Ranunculus cooleyae Vasey & Rose

Cooley's buttercup Ranunculaceae (Buttercup Family)

Status: State Sensitive

Rank: G4S1S2

General Description: A perennial plant reaching 4 to 13% in. (10 to 35 cm) in height. It has a fibrous root system. The leaves are on basal stalks and are 5% in. (15 cm) long. The leaves are kidney shaped and have 3 to 5 deep lobes. The lobes can further be divided 2 to 3 times more. The leaf segments overlap. The yellow flower has 7 to 15 petals, 5 sepals, and numerous stamens. Upon close inspection one can see a V-shaped scale, the nectary scale, at the base of each petal. It can have 70 to 100 fruits (achenes). Each fruit is 1/10 in. (2% mm) long, and has three lateral veins. The fruits have a hooked beak that is 1/8 in. (1 to 2 mm) in length. This species is glabrous throughout.

Identification Tips: Distinctive characteristics of Cooley's buttercup include thin seed coats and the short-hooked beak of the fruits, which are shorter than the fruit bodies. It has particularly showy petals. The deeply lobed, non-compound leaves are quite distinctive; as is the fibrous root system. The solitary flower on a leafless stalk can be a good indicator of *R. cooleyae*.

Phenology: The species can be seen in bloom from July to mid-August. Usually it flowers as the snow melts away from the plant and is one of the first blooming flowers of the season at its elevation.

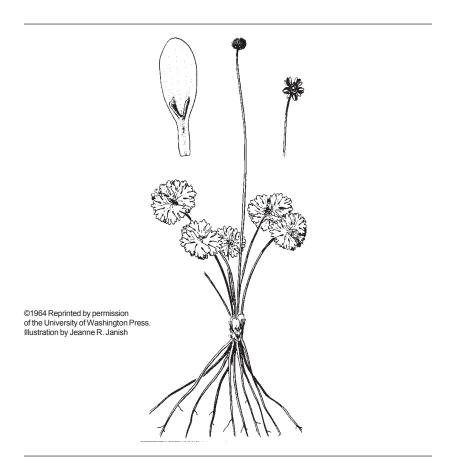
Range: The main range of this species is from the western coast of Alaska south to British Columbia. A few populations have been identified in Snohomish and Grays Harbor counties of Washington state. Population elevations reach as low as 1,640 ft. (500 m) to as high as 6000 ft. (1829 m) in Washington state.

Habitat: Ranunculus cooleyae is found on montane gravelly alluvial slopes, generally facing north. A few populations in Washington have been found very close to lakes. The species has been found on talus slopes, stream outlets, and the edges of receding snowfields. It has been located growing among *Carex* spp.

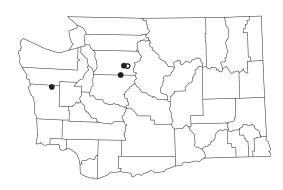
Ecology: Ranunculus cooleyae is considered to be a facultative wetland species (USDA, NRCS 1999) in western Washington.

Ranunculus cooleyae

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Known distribution of Ranunculus cooleyae in Washington



- Current (1980+)
- O Historic (older than 1980)

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State Status Comments: The species is disjunct in Washington, with few occurrences documented.

Inventory Needs: Further inventory on this species is needed for an accurate inventory assessment. Inventory should be taken at past and present known sites in Snohomish and Gray's Harbor counties in Washington.

Threats and Management Concerns: Threats include trampling and collecting by hikers, especially in areas of human recreation, such as lakes.

Comments: A synonym for this species is *Kumlienia cooleyae* Greene (USDA, 1999).

References:

Flora of North America Editorial Committee, eds. 2002. *Flora of North America, Vol. 3: Magnoliidae and Hamamelidae*. Oxford University Press. 127 590 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1964. Vascular Plants of the Pacific Northwest Part 2: Salicaceae to Saxifragaceae. University of Washington Press, Seattle, WA. 597 pp.

USDA, NRCS 1999. The PLANTS database (http://plants.usda.gov/plants). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.